

Table 130.7(C)(9)(a) Arc Flash Hazard/ Risk Category Classification

Task (assumes equipment is energized, and work is done within the Flash Protection Boundary)

Task	HAZARD/RISK CATEGORY			Task	HAZARD/RISK CATEGORY		
	V-RATED	GLOVES	TOOLS		V-RATED	GLOVES	TOOLS
Panelboards rated 240 V and below - Notes 1 and 3	—	—	—	Work on energized parts, including voltage testing	2*	Y	Y
Circuit breaker (CB) or fused switch operation with covers on	0	N	N	Application of safety grounds, after voltage test	2*	Y	N
CB or fused switch operation with covers off	0	N	N	Revenue meters (kW-hour, at primary voltage and current)	—	—	—
Work on energized parts, including voltage testing	1	Y	Y	Insertion or removal	2*	Y	N
Remove/ install CBs or fused switches	1	Y	Y	Cable trough or tray cover removal or installation	1	N	N
Removal of bolted covers (to expose bare, energized parts)	1	N	N	Miscellaneous equipment cover removal or installation	1	N	N
Opening hinged covers (to expose bare, energized parts)	0	N	N	Work on energized parts, including voltage testing	2*	Y	Y
Panelboards or Switchboards rated >240 V and up to 600 V (with molded case or insulated case circuit breakers) - Notes 1 and 3	—	—	—	Application of safety grounds, after voltage test	2*	Y	N
CB or fused switch operation with covers on	0	N	N	NEMA E2 (fused contactor) Motor Starters, 2.3 kV through 7.2 kV	—	—	—
CB or fused switch operation with covers off	1	N	N	Contactor operation with enclosure doors closed	0	N	N
Work on energized parts, including voltage testing	2*	Y	Y	Reading a panel meter while operating a meter switch	0	N	N
600 V Class Motor Control Centers (MCCs) - Notes 2 (except as indicated) and 3	—	—	—	Contactor operation with enclosure doors open	2*	N	N
CB or fused switch or starter operation with enclosure doors closed	0	N	N	Work on energized parts, including voltage testing	3	Y	Y
Reading a panel meter while operating a meter switch	0	N	N	Work on control circuits with energized parts 120 V or below, exposed	0	Y	Y
CB or fused switch or starter operation with enclosure doors open	1	N	N	Work on control circuits with energized parts > 120 V, exposed	3	Y	Y
Work on energized parts, including voltage testing	2*	Y	Y	removal (racking) of starters from cubicles, doors open	3	N	N
Work on control circuits with energized parts 120 V or below, exposed	0	Y	Y	Insertion or removal (racking) of starters from cubicles, doors closed	2	N	N
Work on control circuits with energized parts > 120 V, exposed	2*	Y	Y	Application of safety grounds, after voltage test	3	Y	N
Insertion or removal of individual starter "buckets" from MCC - Note 4	3	Y	N	Removal of bolted covers (to expose bare, energized parts)	4	N	N
Application of safety grounds, after voltage test	2*	Y	N	Opening hinged covers (to expose bare, energized parts)	3	N	N
Removal of bolted covers (to expose bare, energized parts)	2*	N	N	Metal Clad Switchgear, 1 kV and above	—	—	—
Opening hinged covers (to expose bare, energized parts)	1	N	N	CB or fused switch operation with enclosure doors closed	2	N	N
600 V Class Switchgear (with power circuit breakers or fused switches) - Notes 5 and 6	—	—	—	Reading a panel meter while operating a meter switch	0	N	N
CB or fused switch operation with enclosure doors closed	0	N	N	CB or fused switch operation with enclosure doors open	4	N	N
Reading a panel meter while operating a meter switch	0	N	N	Work on energized parts, including voltage testing	4	Y	Y
CB or fused switch operation with enclosure doors open	1	N	N	Work on control circuits with energized parts 120 V or below, exposed	2	Y	Y
Work on energized parts, including voltage testing	2*	Y	Y	Work on control circuits with energized parts > 120 V, exposed	4	Y	Y
Work on control circuits with energized parts 120 V or below, exposed	0	Y	Y	removal (racking) of CBs from cubicles, doors open	4	N	N
Work on control circuits with energized parts > 120 V, exposed	2*	Y	Y	Insertion or removal (racking) of CBs from cubicles, doors closed	2	N	N
Insertion or removal (racking) of CBs from cubicles, doors open	3	N	N	Application of safety grounds, after voltage test	4	Y	N
Insertion or removal (racking) of CBs from cubicles, doors closed	2	N	N	Removal of bolted covers (to expose bare, energized parts)	4	N	N
Application of safety grounds, after voltage test	2*	Y	N	Opening hinged covers (to expose bare, energized parts)	3	N	N
Removal of bolted covers (to expose bare, energized parts)	3	N	N	Opening voltage transformer or control power transformer compartments	4	N	N
Opening hinged covers (to expose bare, energized parts)	2	N	N	Other Equipment 1 kV and above	—	—	—
Other 600 V Class (277 V through 600 V, nominal) Equipment - Note 3	—	—	—	Metal clad load interrupter switches, fused or unfused	—	—	—
Lighting or small power transformers (600 V, maximum)	—	—	—	Switch operation, doors closed	2	N	N
Removal of bolted covers (to expose bare, energized parts)	2*	N	N	Work on energized parts, including voltage testing	4	Y	Y
Opening hinged covers (to expose bare, energized parts)	1	N	N	Removal of bolted covers (to expose bare, energized parts)	4	N	N
				Opening hinged covers (to expose bare, energized parts)	3	N	N
				Outdoor disconnect switch operation (hookstick operated)	3	Y	Y
				Outdoor disconnect switch operation (gang-operated, from grade)	2	N	N
				Insulated cable examination, in manhole or other confined space	4	Y	N
				Insulated cable examination, in open area	2	Y	N

Legend:

V-rated Gloves are gloves rated and tested for the maximum line-to-line voltage upon which work will be done.

V-rated Tools are tools rated and tested for the maximum line-to-line voltage upon which work will be done.

2* means that a double-layer switching hood and hearing protection are required for this task in addition to the other Hazard/ Risk Category 2 requirements of Table 130.7(C)(10) of Part II.

Y = yes (required) **N** = no (not required)

Data provided by Chicago Protective Apparel, Inc.

Notes:

1) 25 kA short circuit current available, 0.03 second (2 cycle) fault clearing time.

2) 65 kA short circuit current available, 0.03 second (2 cycle) fault clearing time.

3) For < 10 kA short circuit current available, the Hazard/ Risk Category required may be reduced by one Number.

4) 65 kA short circuit current available, 0.33 second (20 cycle) fault clearing time.

5) 65 kA short circuit current available, up to 1.0 second (60 cycle) fault clearing time.

6) For < 25 kA short circuit current available, the Hazard/ Risk Category required may be reduced by one Number.